In the Claims

Please amend the claims as follows:

1. (Original) A surface glycoprotein comprising the following features: (a) it is GPI-anchored on the cell surface; (b) it can be removed from the cell membrane by treatment with PI-PLC; and (c) its GPI-anchor is characterized by a non-acetylated inositol ring and diacyl glycerol as lipid tail of the anchor.

2. (Original) The surface glycoprotein of claim 1 which is the surface glycoprotein ACA characterized by the following additional features: (d) it has an isoelectric point of pH 5.5; (e) it is present on progenitor cells, granulocytes, monocytes, B-cells (but not T-cells), melanocytes, and other cells; and (f) it is preferentially expressed during cell division and in tumor cells; or a salt, functional derivative or active fraction thereof.

3. (Original) The surface glycoprotein ACA of claim 2, obtainable from human blood by (a) isolating and lysing cells; (b) isolating, disrupting and pelleting the hemoglobin free membrane of said cells; (c) repeated salting out of the resuspended membranes with ammonium sulfate (70%; 40% saturation); (d) subjecting the proteins precipitated in step (c) to preparative SDS-PAGE under reducing conditions; and (e) isolating the gel band of the protein.

4. (Previously presented) The surface glycoprotein ACA of claim 3 having a molecular weight of about 65 or 68 kD when analyzed by SDS PAGE under reducing conditions.

5. (Currently amended) The surface glycoprotein ACA of claim 2 which contains at least one of the following amino acid sequences:

(a) D-L-V-P-L-E-D-K-V-T-I-L-G-M-T-A ; (SEQ ID NO: 1)

(b) K-L-A-L-S-A-D-D-P-G-F-H-N-F-S-H-Q-R-Q-T; (SEQ ID NO: 2)

(c) D-Q-Q-T-T-S-H-S-S; (SEQ ID NO: 3)

(d) V-L-E-I-M-L-P ; (SEQ ID NO: 4)

(e) F-Q-D-E-S-E-A-N-K; (SEQ ID NO: 5)

(f) M-K-Y-V-N-F-K-F-Y-F; (SEQ ID NO: 6)

(g) N-L-D-F-M-T-W-G-V-T-K-V-T-Y-I-G-Q-P-T-G-G ; (SEQ ID NO: 7)

(h) L-L-M-D-N-N-E-A-V-H; (SEQ ID NO: 8)

(i) F-D-Q-A-W-A-D-T-A-H-T-W; (SEQ ID NO: 9)

(j) K-L-D-D-I-Q-K-D-M-Y-S-Q-Q-D-T (SEQ ID NO: 10); or

(k) G-V-W-I-M-K-N-Q-I-T. (SEQ ID NO: 11)

6. (Previously presented) The surface glycoprotein ACA of claim 2 which is isolated from blood cells.

7. (Original) A process for the isolation of a surface glycoprotein ACA which comprises:

a) isolating and lysing cells from human blood;

(b) isolating, disrupting and pelleting the hemoglobin free membrane of said cells;

(c) repeated salting out of the resuspended membranes with ammonium sulfate (70% ; 40% saturation);

(d) subjecting the proteins precipitated in step (c) to preparative SDS-PAGE under reducing conditions; and

(e) isolating the gel band of a 65 or 68 kD protein.

8. (Original) The surface glycoprotein ACA produced by the process of claim 7.

9. (Previously presented) The surface glycoprotein of claim 5 which is a recombinant protein.

10. (Original) The surface glycoprotein of claim 9 which is produced in a mammalian cell.

11. (Currently amended) A nucleic acid molecule comprising a nucleotide sequence encoding the surface glycoprotein ACA or a functional derivative or fragment thereof of claim 2, wherein said surface glycoprotein ACA contains at least one of the following amino acid sequences:

(a) D-L-V-P-L-E-D-K-V-T-I-L-G-M-T-A; (SEQ ID NO: 1)

(b) K-L-A-L-S-A-D-D-P-G-F-H-N-F-S-H-Q-R-Q-T; (SEQ ID NO: 2)

(c) D-Q-Q-T-T-S-H-S-S; (SEQ ID NO: 3)

(d) V-L-E-I-M-L-P; (SEQ ID NO: 4)

(e) F-Q-D-E-S-E-A-N-K; (SEQ ID NO: 5)

(f) M-K-Y-V-N-F-K-F-Y-F; (SEQ ID NO: 6)

(g) N-L-D-F-M-T-W-G-V-T-K-V-T-Y-I-G-Q-P-T-G-G; (SEQ ID NO: 7)

(h) L-L-M-D-N-N-E-A-V-H; (SEQ ID NO: 8)

(i) F-D-Q-A-W-A-D-T-A-H-T-W; (SEQ ID NO: 9)

(j) K-L-D-D-I-Q-K-D-M-Y-S-Q-Q-D-T; (SEQ ID NO: 10)or
(k) G-V-W-I-M-K-N-Q-I-T. (SEQ ID NO: 11)

12. (Original) The nucleic acid molecule of claim 11 wherein the nucleotide sequence is a genomic DNA sequence or a CDNA sequence.

13. (Previously presented) An expression vector comprising the nucleic acid molecule of claim 11.

14. (Original) A host cell transformed with the expression vector of claim 13.

15. (Original) The host cell of claim 14 which is a mammalian host cell.

16. (Previously presented) A process for producing a surface glycoprotein ACA comprising the steps of: (a) culturing a transformed host cell according to claim 14 in a suitable culture medium; and (b) isolating the protein form the cells or the culture medium.

17. (Previously presented) An antibody to the surface glycoprotein according to claim 5.

18. (Original) The antibody of claim 17 which is a monoclonal antibody.

19. (Previously presented) A method for the diagnosis of a tumor associated with overexpression of ACA or a predisposition for such a tumor which comprises
(a) contacting a target sample with a compound which is capable of specifically binding (i) to the surface glycoprotein ACA according to claim 4 determining the level of ACA; and
(b) comparing the level of ACA protein of the sample determined by use of the compound of step (a) with a control sample obtained from a healthy individual, wherein an elevated level of the surface glycoprotein ACA is indicative for a tumor or a predisposition for such a tumor.

20. (Previously presented) The method of claim 19, wherein the compound is an antibody.

21. (Original) A pharmaceutical composition containing a compound capable of reducing or eliminating (a) the expression of the nucleic acid sequence encoding the surface glycoprotein ACA and/or (b) the biological activity of ACA.

22. Cancelled

23. (Previously presented) The method of claim 19, wherein the cancer is a melanoma, leukemia, renal cancer, lung cancer, breast cancer, colon cancer, gastric cancer, or any other form of cancer.

24. (Previously presented) A kit containing the antibody of claim 17.